

U.S. Department of State Middle East and North Africa Environment, Science, Technology & Health Hub Newsletter

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Celebrating Earth Day in the Middle East

Egypt: Students Plant 50 Flower Trees in Cairo

U.S. Embassy Cairo hosted 30 students for a seminar on energy challenges in Egypt that was followed by a tree planting activity at Al Azhar Park in Cairo. The students planted over 50 flowering trees and spoke to park visitors about saving electricity and water.



Photo courtesy of Embassy Cairo

Israel: Rehabilitating the Jordan River

U.S. Embassy Tel Aviv celebrated Earth Day 2015 on the banks of the Jordan River where Ambassador Daniel Shapiro participated in several Earth Day programs hosted by EcoPeace, the leading environmental NGO in Israel engaged in cross-border water cooperation. Ambassador Shapiro used the opportunity to recognize and praise EcoPeace's USAID funded "Good Water Neighbors" project which plays a leading role in Israel's efforts to work across border on water-related challenges and has demonstrated significant success in building lasting ties between the communities on both sides of the Jordan River. Ambassador Shapiro led approximately fifty of the water trustees and embassy staff in the clean-up of the banks of the Jordan River.

Photos: Top: Ambassador Shapiro with EcoPeace at the Jordan River site. Below: Water trustees. Photo courtesy of Embassy Tel Aviv.



Jordan: Forest Clean-up and Anti-Littering Outreach



Forest Clean Up - group photo of the volunteers.

In recognition of Earth Day, the NEA Hub organized a forest cleanup. This year's Earth Day theme was "It's Our Turn to Lead," underlining the importance of community-based action. In that spirit, the NEA Hub joined forces with the Jordanian Forestry Department, youth volunteers, members of the Embassy community, and staff from the International Air Transport Association (IATA) to clean a local forestry station. The group collected more than 80 bags of garbage from the forest site, including plastic bottles, utensils, glass, and even used diapers. On Earth Day, April 22, the Regional Hub Officer spoke about the clean-up on-air Jordan's official radio station 99.3FM, emphasizing the importance of individual and community mobilization to protect the environment and control against littering. The interview was also an occasion to highlight U.S. Environmental Protection Agency collaboration with the Greater Amman Municipality on waste-management collection. The partnership was facilitated under the Climate and Clean Air Collation's Municipal Solid Waste Initiative (MSWI), which Amman joined in 2014.



Hub officer at Radio Jordan studios.
Photo courtesy of NEA Hub.

U.S. Embassy Kuwait Promotes Ocean Protection at Beach Clean-up Event



U.S. Embassy Kuwait, in collaboration with Dow Chemical Company and the Kuwait Society for the Protection of Animals and their Habitat, hosted a beach cleanup event on March 6 with over 100 volunteers. U.S. Ambassador to Kuwait, Douglas A. Silliman lead the Embassy staff and volunteers from K'S PATH, Dow Chemical and local schools at Al-Sulaibkhat nature reserve in Kuwait City. Follow the link to watch a video of the event:

<https://www.youtube.com/watch?v=VqUaiOCyUNU>

Ambassador Silliman and volunteers.

Photo courtesy of Embassy Kuwait

World Water Day 2015: Focus on Water Security

According to a global study, experts predict that by 2030 if the world continues business-as-usual, water demand could outstrip supply by 40%. This has the potential to put 3 trillion dollars of the global domestic product – or 22% of the world's economy – at risk. Water demand and increased population are only a few factors that affect water-security; climate change is also affecting supplies around the world. By 2025, as much as two-thirds of the world's population could be living under water-stressed conditions where water becomes an impediment to health, peace, and socio-economic development. Statistics like this one make water one of the largest challenges of the 21st century, a foreign policy priority, and an area in which the United States Department of State (DoS) is actively engaged. On March 22, the World celebrated World Water Day, and the DoS joined global efforts to highlight water diplomacy and development aid to address the many challenges the water sector faces around the world, confirming its commitment to work with the international community to save millions of lives and help countries develop sustainably and peacefully. To learn about the United States Government's global water-security efforts, please follow: <http://www.state.gov/e/oes/water/programpartnerships/index.htm>



The United States is committed to help solve global water scarcity problems. The Department of State leads by example by incorporating water conservation technology and practices into its facilities in the United States and overseas. For example, U.S. Consulate Dubai has a water efficient drip irrigation system.

Jordan Valley Visit Features Transboundary Water Cooperation and Innovative Hydroponic Farming to Reduce Water Demand



Minister Nasser and Ambassador Wells at the Adaseyeh Weir. Photo courtesy of NEA Hub.

Jordanian Minister of Water Hazem Al-Nasser and Secretary General of the Jordan Valley Authority Sa'ad Abu Hammour led U.S. Ambassador to Jordan, Alice G. Wells on a February 28 tour of the Jordan Valley, featuring key transboundary water sites, such as Al Wehdah Dam on the Yarmouk River between Jordan and Syria, and areas along the Jordan River between Jordan and Israel. The tour underscored the importance of shared transboundary water management and cooperation, since approximately 60 percent of Jordan's water resources are shared, with much of it originating outside its borders. Jordan remains one of the most water-scarce countries worldwide with annual per capita renewable water resources around 130 cubic meters. Given Jordan's limited water resources, finding ways to produce higher-value crops with less water is critical.

On the tour the Ambassador visited a USAID-funded Hydroponic Green Farming Initiative (HGFI) demonstration site. Existing greenhouses were converted to hydroponic systems, substantially lowering water and energy requirements. Hydroponic lettuce grown at the site uses one-third of the land, 90 percent less water, and significantly less fertilizer and pesticide. The hydroponic lettuce commands as much as five times the price of soil-grown lettuce. For more information on the HGFI project please visit: <http://poweringag.org/2013-winners/eco-consult>



Ambassador Wells at the hydroponic farm.

The Opening of the MENA Biorisk Management Training Division



U.S. Ambassador to Jordan Alice Wells joined by UK Ambassador Millett, Canadian Ambassador Saccomani and President of JUST, Malkawi. Photo courtesy of BRMTD

On February 10, the Princess Haya Biotechnology Center at the Jordan University of Science and Technology (JUST), hosted an opening ceremony for the new Biorisk Management and Genomics Training Divisions at the University Campus. This was a multilateral effort with technical and financial support provided by the United States (technical assistance and \$3.4 million in funding), United Kingdom, and Canadian Governments. The training divisions will allow laboratory workers, public health experts, government officials, and other professionals from across the region to share knowledge and learn the best practices on important issues such as infectious disease detection. The divisions will make cutting-edge science possible in the region, while mitigating the risk of disease outbreaks, opening new research opportunities in the field of genomics, and enhancing capacity for biorisk management and technological capabilities of laboratories in the Middle East and North Africa (MENA) region.

U.S. Ambassador to Jordan Alice G. Wells, British Ambassador Peter Millett, and Canadian Ambassador Bruno Saccomani as well as 200 academics, researchers, and experts from across Jordan, Europe and the United States attended the opening event and toured the new facility. The newly established training divisions aim to provide a sustainable culture of biosafety and biosecurity in the region, to increase the capacity for secure and safe diagnostic methods, and to reduce potential biological threats to the international community. For more information on the training and services available at JUST please visit: <http://www.just.edu.jo/Centers/PrincessHayaBiotechnologyCenter/Pages/MENABioriskManagementTrainingDivision.aspx>

Moroccans and Jordanians Exchange Expertise on Rangeland Management



Representatives from Morocco's High Commission on Water, Forests and to Combat Desertification met with counterparts from the Hashemite Fund for Development of the Jordan Badia March 14- 21. The study tour, funded by the State Department and the U.S. Forest Service, provided Jordanians and Moroccans an opportunity to exchange expertise related to community engagement and alternative livelihoods for grazing communities. The delegation also examined the unique role organizations such as the Hashemite Fund can play in managing rangelands.

HRH Sharifa Zein, Chairperson of the Hashemite Fund board joined by the Moroccan delegation and staff. Photo courtesy of Hashemite Fund.

USFS Nursery Tree Seedling Improvement Workshop in Jordan

Advancing environmental cooperate linked to the U.S.-Jordan Free Trade Agreement, the U.S. Forest Service (USFS) held a workshop in March at Faisal Nursery in Jordan on tree seedling improvements for nursery managers. The State Department funded project aims to improve nursery practices and the survival rate of seedlings planted as part of Jordan's extensive reforestation efforts. Jordan's Forestry Department has 13 nurseries across the country. The Jordan project builds on an existing USFS project in Lebanon with private sector nursery managers. Lebanese forestry experts traveled to Jordan to share their experiences and techniques, paving the way for regional cooperation on protecting important forest resources. During the two-day workshop, led by Lebanese and USFS technical experts, Jordanian Forestry Department employees were introduced to new planting techniques, as well as water conservation practices that substantially improved seedling growth with far less water.



USFS experts and Jordanian Forestry Department employees during the workshop. Photo courtesy of NEA Hub.

According to the Arbor Day Foundation, a single tree can provide over \$85.00 of services in a year. In the US, citizens can use a Tree Benefit Calculator to estimate the economic benefit of a single tree. An olive tree in the city, for example, with a 30cm diameter, provides about 85USD of services each year.

<http://www.treebenefits.com/calculator/>

In February: Recognizing Women in Science Honoree Dr. Maryam Matar



Dr. Matar, Photo courtesy of Embassy Abu Dhabi

Dr. Matar has founded the UAE Genetic Diseases Association and the UAE Down's Syndrome Association, & she is the Deputy Chairperson of Dubai Cares, an organization that works to improve children's access to quality primary education in developing countries. She is also the Director General of the Community Development Authority (CDA). In 2014, Dr. Matar was named one of the most influential women scientists in the Islamic World by UK based Muslim Science magazine, and she ranked 41st in CEO Middle East magazine's list of 100 Most Powerful Arab Women. In 2012, she was selected by the Arab League's Scientific and Humanitarian Development Program of the Arab Women Organization as Ambassador of Goodwill for Women and Children.

In March: Recognizing 2015 Women in Science Honoree in March: Dr. Rana Dajani

An advocate for the theory of biological evolution and Islam, Dr. Dajani's research focuses on genome-wide association studies concerning diabetes, cancer and stem cells. She advocated the establishment of the law for stem cell research and therapy in Jordan, which is the first such regulation in the Arab and Islamic region. She is a 2014 Eisenhower Fellow, and in 2014 Dr. Dajani was named one of the most influential women scientists in the Islamic World by UK based Muslim Science magazine and ranked 13 in CEO Middle East magazine's list of 100 Most Powerful Arab Women. Dr. Dajani is also founder and President of "We Love Reading"; an initiative to create a library in every neighborhood at Mosques to encourage both parents and children to enjoy reading together. She recently started an online initiative targeting kids in the Arab World. The new online database contains scientific question and answers in Arabic for inquisitive children yearning to learn. The questions were collected from all over Jordan, including Syrian Refugee camps, villages and private school kids, and answers were provided by scientists from different disciplines. The database is also a work in process and welcomes contributions from scientists around the world. The online database can be found at: <http://tinyurl.com/kdogxdw>



Dr. Dajani. Photo courtesy of Embassy Amman

In April: Recognizing 2015 Women in Science Honoree Dr. Nisrine Machaka Hourri



Dr. Machaka-Hourri. Photo courtesy of Embassy Beirut

Dr. Machaka-Hourri is not only an environmentalist at heart but an accomplished plant researcher with over 14 years of experience. She received her PhD in ecology from the University of Reading, United Kingdom while three children. She did her Postdoctoral studies at U.C. Berkeley where she received the Heckard Endowment Fund, which allowed her to conduct research on plants. Dr. Machaka-Hourri has served as a consultant for many international organizations and has recently received a grant from the Critical Ecosystem Partnership Fund to publish a new flower photographic guide for Wild Flowers of Lebanon. She continues to be a mentor and role model to numerous students aspiring for quality higher education. In addition to being an environmental scientist, she is a co-author of Photographic Guide to Wild Flowers of Lebanon.

Interested in U.S. Environmental Businesses and Exports?

Check out this Department of Commerce link: <http://export.gov/industry/environment/>
And visit the U.S. Embassy Web site in your MENA country.

This report is published by Hub Officer Elizabeth Hattingh and Hub Specialist Yara Abu Laban, with contributions from U.S. missions in the region.

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